IN THE CLAIMS

Please amend claims 1, 26, 31, 32, 37 and 50 and cancel claim 16 as follows.

Claim 1 (Currently Amended): A method for generating a digital image indicative of an internal anatomy of a person, comprising:

scanning the internal anatomy of the person at a plurality of positions along an axis to obtain scanning data, wherein the scanning at each position is performed over at least one respiratory cycle of the person;

generating a plurality of cross-sectional digital images based on the scanning data;

generating first and second cross-sectional digital image groups associated with first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state;

generating first and second 3-D digital images utilizing the first and second cross-sectional digital image groups, respectively; and

generating a resultant 3-D digital image indicating at least a portion of the internal anatomy of the person utilizing the first and second 3-D digital images; and

storing the resultant 3-D digital image in a memory device.

Claim 2 (Previously Presented): The method of claim 1, wherein generating the resultant 3-D digital image comprises:

performing a minimum intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 3 (Original): The method of claim 2, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of a tumor and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, wherein each of the first plurality of voxel intensity values are less than each of the second plurality of voxel intensity values.

Claim 4 (Previously Presented): The method of claim 1, wherein generating the resultant 3-D digital image comprises:

performing a maximum intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 5 (Original): The method of claim 4, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of a tumor and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, wherein each of the first plurality of voxel intensity values are greater than each of the second plurality of voxel intensity values.

Claim 6 (Previously Presented): The method of claim 1, wherein generating the resultant 3-D digital image comprises:

performing an average intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 7 (Previously Presented): The method of claim 1, wherein generating the resultant 3-D digital image comprises:

performing a maximum intensity projection of the first and second 3-D digital images to obtain a third 3-D digital image;

generating a boundary within the third 3-D digital image around a predetermined portion of the internal anatomy of the person;

performing a minimum intensity projection of the predetermined portion of the third 3-D digital image to obtain a fourth 3-D digital image; and

combining the third 3-D digital image and the fourth 3-D digital image to obtain the resultant 3-D digital image.

Claim 8 (Original): The method of claim 7, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of locations of a tumor during at least one respiratory cycle and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, the first plurality of voxel intensity values being greater than each of the second plurality of voxel intensity values.

Claim 9 (Previously Presented): The method of claim 7, further comprising:

color coding a portion of the resultant 3-D digital image; and

displaying the color-coded resultant 3-D digital image on a display monitor.

Claim 10 (Previously Presented): The method of claim 7, further comprising displaying the resultant 3-D digital image on a display monitor using a volume rendering technique.

Claim 11 (Original): The method of claim 7, further comprising storing the resultant 3-D digital image in a memory.

Claim 12 (Previously Presented): The method of claim 1, wherein generating the resultant 3-D digital image comprises:

performing a minimum intensity projection of the first and second 3-D digital images to obtain a third 3-D digital image;

generating a boundary within the third 3-D digital image around a predetermined portion of the internal anatomy of the person;

performing a maximum intensity projection of the predetermined portion of the third 3-D digital image to obtain a fourth 3-D digital image; and

combining the third 3-D digital image and the fourth 3-D digital image to obtain the resultant 3-D digital image.

Claim 13 (Original): The method of claim 12, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of locations of a tumor during at least one respiratory cycle and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, the first plurality of voxel intensity values being less than each of the second plurality of voxel intensity values.

Claim 14 (Original): The method of claim 12, further comprising:

color coding a portion of the resultant 3-D digital image; and

displaying the color-coded resultant 3-D digital image on a display monitor.

Claim 15 (Original): The method of claim 12, further comprising displaying the resultant 3-D digital image on a display monitor using a volume rendering technique.

Claim 16 (Cancelled).

Claim 17 (Original): The method of claim 1, wherein scanning the internal anatomy of the person comprises monitoring a position on a chest of the person during respiration by the person to determine the time period of the respiratory cycle of the person.

Claim 18 (Original): The method of claim 1, wherein the at least a portion of the internal anatomy of the person comprises a tumor.

Claim 19 (Original): The method of claim 1, wherein the plurality of cross-sectional digital images comprises a plurality of computerized tomography images.

Claim 20 (Original): The method of claim 1, wherein the plurality of cross-sectional digital images comprises a plurality of magnetic resonance images.

Claim 21 (Previously Presented): The method of claim 1, wherein the first and second 3-D digital images comprises first and second 3-D computerized tomography images, respectively.

Claim 22 (Original): The method of claim 1, further comprising displaying at least a portion of the resultant 3-D digital image on a display monitor.

Claim 23 (Original): The method of claim 1, further comprising displaying a 2-D portion of the resultant 3-D digital image on a display monitor.

Claim 24 (Original): The method of claim 1, further comprising:

color coding a portion of the resultant 3-D digital image; and

displaying the color-coded resultant 3-D digital image on a display monitor.

Claim 25 (Original): The method of claim 24, wherein the color-coded resultant 3-D digital image is generated using a volume rendering display technique.

Claim 26 (Currently Amended): A system for generating a digital image indicative of an internal anatomy of a person, comprising:

a respiratory monitoring device generating a first signal indicative of a respiratory state of the person;

a scanning device configured to scan an internal anatomy of the person to obtain scanning data; and

a computer operably coupled to both the respiratory monitoring device and the scanning device, the computer configured to generate a plurality of cross-sectional digital images based on the scanning data, the computer further configured to generate first and second cross-sectional digital image groups associated with the first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state, the computer further configured to generate first and second 3-D digital images utilizing the first and second cross-sectional digital image groups, respectively, the computer further configured to generate a resultant 3-D digital image indicating at least a portion of the internal anatomy of the person utilizing the first and second 3-D digital images, the computer further configured to store the resultant 3-D digital image in a memory device.

Claim 27 (Previously Presented): The system of claim 26, wherein the computer is further configured to perform a minimum intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 28 (Previously Presented): The system of claim 27, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of a tumor and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, wherein each of the first plurality of voxel intensity values are less than each of the second plurality of voxel intensity values.

Claim 29 (Previously Presented): The system of claim 26, wherein the computer is further configured to perform a maximum intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 30 (Original): The system of claim 29, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of a tumor and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, wherein each of the first plurality of voxel intensity values are greater than each of the second plurality of voxel intensity values.

Claim 31 (Currently Amended): The system of claim 26, wherein the computer is further configured to ~~to~~ perform an average intensity projection of the first and second 3-D digital images to obtain the resultant 3-D digital image.

Claim 32 (Currently Amended): The system of claim 26, wherein the computer is further configured to ~~to~~ perform a maximum intensity projection of first and second 3-D digital images to obtain a third 3-D digital image;

the computer being further configured to generate a boundary within the third 3-D digital image around a predetermined portion of the internal anatomy of the person;

the computer being further configured to perform a minimum intensity projection of the predetermined portion of the third 3-D digital image to obtain a fourth 3-D digital image; and

the computer being further configured to combine the third 3-D digital image and the fourth 3-D digital image to obtain the resultant 3-D digital image.

Claim 33 (Original): The system of claim 32, wherein the resultant 3-D digital image comprises a first region having a first plurality of voxel intensity values indicative of locations of a tumor during at least one respiratory cycle, and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, the first plurality of voxel intensity values being greater than each of the second plurality of voxel intensity values.

Claim 34 (Original): The system of claim 32, wherein the computer is further configured to color code a portion of the resultant 3-D digital image and to display the color-coded resultant 3-D digital image on a display monitor.

Claim 35 (Original): The system of claim 32, further comprising displaying the resultant 3-D digital image on a display monitor using a volume rendering technique.

Claim 36 (Original): The system of claim 32, further comprising storing the resultant 3-D digital image in a memory.

Claim 37 (Currently Amended): The system of claim 26, wherein the computer is further configured to ~~to~~ perform a minimum intensity projection of the first and second 3-D digital images to obtain a third 3-D digital image;

the computer being further configured to generate a boundary within the third 3-D digital image around a predetermined portion of the internal anatomy of the person;

the computer being further configured to perform a maximum intensity projection of the predetermined portion of the third 3-D digital image to obtain a fourth 3-D digital image; and

the computer being further configured to combine the third 3-D digital image and the fourth 3-D digital image to obtain the resultant 3-D digital image.

Claim 38 (Original): The system of claim 37, wherein the resultant 3-D digital images comprises a first region having a first plurality of voxel intensity values indicative of locations of a tumor during at least one respiratory cycle and a second region having a second plurality of voxel intensity values indicative of the internal anatomy surrounding the tumor, the first plurality of voxel intensity values being less than each of the second plurality of voxel intensity values.

Claim 39 (Original): The system of claim 37 wherein the computer is further configured to color code a portion of the resultant 3-D digital image, and to display the color-coded resultant 3-D digital image on a display monitor.

Claim 40 (Original): The system of claim 37, wherein the computer is further configured to display the resultant 3-D digital image on a display monitor using a volume rendering technique.

Claim 41 (Original): The system of claim 37, wherein the computer is further configured to store the resultant 3-D digital image in a memory.

Claim 42 (Previously Presented): The system of claim 26, wherein the at least a portion of the internal anatomy of the person comprises a tumor.

Claim 43 (Original): The system of claim 26, wherein the plurality of cross-sectional digital images comprises a plurality of computerized tomography images.

Claim 44 (Original): The system of claim 26, wherein the plurality of cross-sectional digital images comprises magnetic resonance images.

Claim 45 (Previously Presented): The system of claim 26, wherein the first and second 3-D digital images comprise first and second 3-D computerized tomography images, respectively.

Claim 46 (Original): The system of claim 26, wherein the computer is further configured to display at least a portion of the resultant 3-D digital image on a display monitor.

Claim 47 (Original): The system of claim 26, wherein the computer is further configured to display a 2-D portion of the resultant 3-D digital image on a display monitor.

Claim 48 (Original): The system of claim 26, wherein the computer is further configured color code a portion of the resultant 3-D digital image and to display the color-coded resultant 3-D digital image on a display monitor.

Claim 49 (Original): The system of claim 48, wherein the color-coded resultant 3-D digital image is generated using a volume rendering display function.

Claim 50 (Currently Amended): An article of manufacture, comprising:

a computer storage medium having a computer program encoded therein for generating a digital image indicative of an internal anatomy of a person, the computer storage medium comprising:

code for inducing a scanning device to scan the internal anatomy of the person at a plurality of positions along an axis to obtain scanning data, wherein the scanning at each position is performed over at least one respiratory cycle of the person;

code for generating a plurality of cross-sectional digital images based on the scanning data;

code for generating first and second cross-sectional digital image groups associated with the first and second respiratory states, respectively, of the person, the first cross-sectional digital image group including first and second digital images of the plurality of cross-sectional digital images obtained at first and second positions, respectively, along the axis, the when the person has the first respiratory state, the second cross-sectional digital image group including third and fourth digital images of the plurality of cross-sectional digital images obtained at third and fourth positions, respectively, along the axis, when the person has the second respiratory state;

code for generating first and second 3-D digital images utilizing the first and second cross-sectional digital image groups, respectively; ~~and~~

code for generating a resultant 3-D digital image indicating at least a portion of the internal anatomy of the person utilizing the first and second 3-D digital images; and

code for storing the resultant 3-D digital image in a memory device.